

From: glowbugs@sco.theporch.com Tue Apr 1 18:41:43 1997
Return-Path: <glowbugs@sco.theporch.com>
Received: from sco.theporch.com (sco.theporch.com [207.234.31.38])
by uro.theporch.com (8.8.6.Alpha2/AUX-3.1.1)
with ESMTP id SAA20227 for <shimshon@uro.theporch.com>;
Tue, 1 Apr 1997 18:41:42 -0600 (CST)
From: glowbugs@sco.theporch.com
Received: from sco.theporch.com (localhost [127.0.0.1])
by sco.theporch.com (8.8.6.Alpha2/SCO-5.0.2) with SMTP
id AAA05189; Wed, 2 Apr 1997 00:38:43 GMT
Date: Wed, 2 Apr 1997 00:38:43 GMT
Message-Id: <199704020038.AAA05189@sco.theporch.com>
Errors-To: ws4s@infoave.net
Reply-To: glowbugs@sco.theporch.com
Originator: glowbugs@sco.theporch.com
Sender: glowbugs@sco.theporch.com
Precedence: bulk
To: Multiple recipients of list <glowbugs@sco.theporch.com>
Subject: GLOWBUGS digest 493
X-Listprocessor-Version: 6.0 -- ListProcessor by Anastasios Kotsikonas
X-Comment: Please send list server requests to listproc@sco.theporch.com
Status: 0

GLOWBUGS Digest 493

Topics covered in this issue include:

- 1) Re: hum hum hummmmmmmmm
by EricNess@aol.com
- 2) Re: hum hum hummmmmmmmm
by Bob Roehrig <broehrig@admin.aurora.edu>
- 3) Re: hum hum hummmmmmmmm
by Dan Cox <village1@lightspeed.net>
- 4) Re: Look Ma, no Xfmr! (was Re: The 6T9'er)
by Dan Cox <village1@lightspeed.net>
- 5) 811a's
by Dan Cox <village1@lightspeed.net>
- 6) Re: Look Ma, no Xfmr! (was Re: The 6T9'er)
by mjsilva@ix.netcom.com (michael silva)
- 7) Re: Look Ma, no Xfmr! - hot chassis/bypass caps
by Bob Roehrig <broehrig@admin.aurora.edu>
- 8) Re: Look Ma, no Xfmr! (was Re: The 6T9'er)
by Bob Roehrig <broehrig@admin.aurora.edu>
- 9) Re: Look Ma, no Xfmr! (was Re: The 6T9'er)
by Dan Cox <village1@lightspeed.net>
- 10) RE: Regen. rcvr sensitivity
by Sandy W5TVW <ebjr@worldnet.att.net>
- 11) Drake info

by "Steve, N2MNN" <n2mnn@openix.com>

Date: Mon, 31 Mar 1997 20:35:43 -0500 (EST)
From: EricNess@aol.com
To: leeboo@ct.net, glowbugs@sco.theporch.com
Subject: Re: hum hum hummmmmmmmm
Message-ID: <970331203534_1518814134@emout11.mail.aol.com>

I too had a hum problem when I built an AC supply for my regen receiver. At first I thought that I could use a huge cap (about 200 uF) to snuff out any hint of ripple but alas, all I could hear out of the receiver was a raspy hum. The raspy hum it turns out was caused by the silicon rectifiers I was using. The harmonics from the noise that silicon rectifiers make as they switch can extend well into the HF area. The solution to the silicon switching problem is to bypass the diodes with .01 uF caps. This solved the raspy hum but a more familiar 60 Hz hum remained.

I tired many things to get rid of the 60 Hz hum but, it finally took some iron to knock it out. I used the primary of a audio output transformer but any filter choke would work. BTW, the inductance of the audio choke was around 5 Hy.

I have heard that the AC on the heaters can also be a source of hum but, since I used a battery for the heater supply on my receiver, I didn't have that problem.

73, Eric WD6DGX

Date: Mon, 31 Mar 1997 21:02:31 -0600 (CST)
From: Bob Roehrig <broehrig@admin.aurora.edu>
To: Leon Wiltsey <leeboo@ct.net>
Cc: Multiple recipients of list <glowbugs@sco.theporch.com>
Subject: Re: hum hum hummmmmmmmm
Message-ID: <Pine.ULT.3.95.970331205316.4146C-100000@admin.aurora.edu>

On Mon, 31 Mar 1997, Leon Wiltsey wrote:

> The ripple on my b+ is .35v and it drive the 6sl7
> nicely so I have hum. Am using 75 mfd caps in filter now,
> Wish the det put out a larger sig. The most I can get
> out of it is .25vac using my sig ben with mod. on. If the det
> output was higher I would not have a problem. Trying different

> voltages on 6aq5 det make no real diff in output.

I looked at my regen tonight and made some measurements. On a good CW signal on 80 meters, I get about 500mv P-P signal at the detector output. The detector is a 6AU6. Circuit is a Hartley. Regen controlled with a screen pot between B+ and ground. Plate supply is 125V. Screen voltage on the edge of regen is 30V.

Plate supply uses an isolation transformer. Full wave diode bridge. Filter is three 40 uf caps. Between cap 1 and 2 I have a small choke, which I never measured but is not doing a whole lot of good. Input ripple is 2V P-P, across cap 2 I have 750mv P-P ripple. That point feeds B+ to the audio stage (a 6AK6). Between filter caps 2 and 3 I have a 2.2K resistor. B+ for the detector taken from cap 3. Ripple there is only 20mv P-P.

Filament power obtained from 6.3VAC transformer with center tap grounded. I agree with someone else - if you don't have a center tap to ground, then use a 100 ohm pot across the filaments with the wiper to ground.

I suggest that if you don't have a filter choke, then try the primary of a small filament transformer.

E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-5530

Date: Mon, 31 Mar 1997 19:27:10 +0000
From: Dan Cox <village1@lightspeed.net>
To: leeboo@ct.net
Subject: Re: hum hum hummmmmmmmm
Message-ID: <3340100E.18AF@lightspeed.net>

Leon Wiltsey wrote:

The ripple on my b+ is .35v and it drive the 6sl7 nicely so I have hum. Am using 75 mfd caps in filter now, Wish the det put out a larger sig. The most I can get out of it is .25vac using my sig ben with mod. on. If the det output was higher I would not have a problem. Trying different voltages on 6aq5 det make no real diff in output.

Thank the good LORD for all that you have!!!

Leon B Wiltsey jr. (Lee)

68yr old semi disabled senior
(stroke got my balance and coordination)
play keyboard and sing
music 1920's to 60'
none of the 80'S- 90'S noise

Have you tried a filter reactor/choke in your high voltage supply?
Also you might look for capacitors that are inductive in the supply as
they can cause motorboating and hum from regeneration.

Date: Mon, 31 Mar 1997 19:32:52 +0000
From: Dan Cox <village1@lightspeed.net>
To: bry@mnsinc.com
Subject: Re: Look Ma, no Xfmr! (was Re: The 6T9'er)
Message-ID: <33401164.738A@lightspeed.net>

Brian,

Yes I have an isolation transformer good to 200 watts as well as a
90 watter. They ARE a GOOD thing to have! I got buzzed on a heathkit
that had bad bypasses from the ac to ground. I touched ground and the
chassis and guess what happened? YOWWWWWOWWW*&^%\$!#\$\$!!
But I'm much better now.

P.S What's wrong with chasing spaceships behind comets? Doesn't
everyone?
Dan :)

Date: Mon, 31 Mar 1997 19:38:21 +0000
From: Dan Cox <village1@lightspeed.net>
To: ebjr@worldnet.att.net
Subject: 811a's
Message-ID: <334012AD.692B@lightspeed.net>

I have to attest to 811a ruggedness. I was working on an amp the
othe night with two of them in it at about 1500 volts. Grounded
grid. WITHOUT the grids grounded!:(Blew the emulsion coating
right off the plate of one tube. BUT it still functions great and

runs fine(real shiny though). Stupid mistake but saved by rugged tubes.

Date: Mon, 31 Mar 1997 23:18:51 -0600 (CST)
From: mjsilva@ix.netcom.com (michael silva)
To: glowbugs@theporch.com
Subject: Re: Look Ma, no Xfmr! (was Re: The 6T9'er)
Message-ID: <199704010518.XAA18073@dfw-ix7.ix.netcom.com>

Brian wrote:

>
>Dan, Cory and Michael.
>
>I challenge you all to look for at least an ISOLATION transformer!!

Not a problem here -- I've got four of various sizes.

>
>For safety's sake, you really would be better off...

Ah, but is this really true in the situation I questioned? How much danger *is* there with a three-wire GFI-protected outlet? Might this fear not be a misplaced leftover from the days of non-protected, non-polarized plugs? As Dan related, you can get also get hit due to bad AC line caps, as well as winding-to-core shorts and miscellaneous foul-ups. I'm still waiting for a definitive answer as to why this would be a Bad Thing To Do.

73,
Mike, KK6GM

Date: Tue, 1 Apr 1997 08:18:42 -0600 (CST)
From: Bob Roehrig <broehrig@admin.aurora.edu>
To: Dan Cox <village1@lightspeed.net>
Cc: Multiple recipients of list <glowbugs@sco.theporch.com>
Subject: Re: Look Ma, no Xfmr! - hot chassis/bypass caps
Message-ID: <Pine.ULT.3.95.970401081448.12138A-100000@admin.aurora.edu>

I mentioned some time back that I HATE AC LINE BYPASS CAPS!
In much equipment, these caps are way too large and pass way

too much current. Even if they are good, they will trip GFI breakers. If you insist on having line bypass aps in your gear, replace the existing ones with .001 caps at the highest voltage you can obtain (like 1000V). If you have the chassis grounded, these caps don't really do much good IMHO.

E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
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630-844-4898 Fax 630-844-5530

Date: Tue, 1 Apr 1997 08:31:19 -0600 (CST)
From: Bob Roehrig <broehrig@admin.aurora.edu>
To: michael silva <mjsilva@ix.netcom.com>
Cc: Multiple recipients of list <glowbugs@sco.theporch.com>
Subject: Re: Look Ma, no Xfmr! (was Re: The 6T9'er)
Message-ID: <Pine.ULT.3.95.970401082753.12138D-1000000@admin.aurora.edu>

tOn Tue, 1 Apr 1997, michael silva wrote:

> Ah, but is this really true in the situation I questioned? How much
> danger *is* there with a three-wire GFI-protected outlet?

If you use a 3-wire cord, if you fuse the hot side at the entrance to the chassis, if you isolate the neutral from the chassis (you should not have ground and neutral tied together), if the chassis is tied to the ground lead, then the setup should not be a problem.

E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
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Date: Tue, 01 Apr 1997 12:49:39 +0000
From: Dan Cox <village1@lightspeed.net>
To: mjsilva@ix.netcom.com
Subject: Re: Look Ma, no Xfmr! (was Re: The 6T9'er)
Message-ID: <33410463.345A@lightspeed.net>

I'm still waiting for a definitive answer as to why this would be a Bad Thing To Do.

73,

Mike, KK6GM

As long as the chassis is the grounded side then I don't really see a problem. I guess doing it this way just has a deathly air to it(to some people), that's all. :)

Dan, KD6NXI

Date: Tue, 1 Apr 1997 23:19:07 +0000
From: Sandy W5TVW <ebjr@worldnet.att.net>
To: glowbugs@sco.theporch.com
Subject: RE: Regen. rcvr sensitivity
Message-ID: <19970401231906.AAA18558@LOCALNAME>

I made some quick checks on my two active receivers and came up with the following:

National 2DCSW-3 receiver (model 2). Uses a '32 TRF stage, '32 detector, '30 AF amp. Sensitivity spot checked and found as below.

Mhz	CW	AM
1.6	3 uv.	12uv.
3.5	1-2 uv.	10 uv.
7.0	1-2uv.	10 uv.
14	2 uv	12 uv.
21	2-3 uv	12-14 uv

Tried bandspread and general coverage coil sets. No difference except better stability with bandspread sets. "AM" sensitivity measured just below oscillation point with generator 30% modulated.

Homebrew one tube set. Uses a single 1J6G tube (Same as the '19 except for base) dual triode. One stage detector one stage AF amp.

Mhz.	CW	AM
3.5	3-4 uv.	15-20 uv.

Same test conditions as above. Generator used was a General Radio 1001A terminated with 50 adapter and 50 ohm termination.

73,

E. V. Sandy Blaize, W5TVW

"Boat Anchors collected, restored, repaired, traded and used!"

417 Ridgewood Drive,
Metairie, LA., 70001
ebjr@worldnet.att.net
Looking for: 860 tubes, WL-460 tubes, RK-18,20,28 tubes
Butternut HF2V antenna, G-R test gear.....*

Date: Tue, 1 Apr 1997 17:43:54 -0500
From: "Steve, N2MNN" <n2mnn@openix.com>
To: glowbugs@theporch.com
Subject: Drake info
Message-ID: <199704012243.RAA25509@pantera.openix.com>

Hello all,

I think I am leaning towards the purchase of a Drake receiver and transmitter pair, and would like to obtain more info on the different models that were made. Does anyone know of the existence of a list on the Internet just for Drake owners?

Thanks,

Steve, N2MNN
n2mnn@openix.com

End of GLOWBUGS Digest 493
